SECTION 9

ACCESS MANAGEMENT

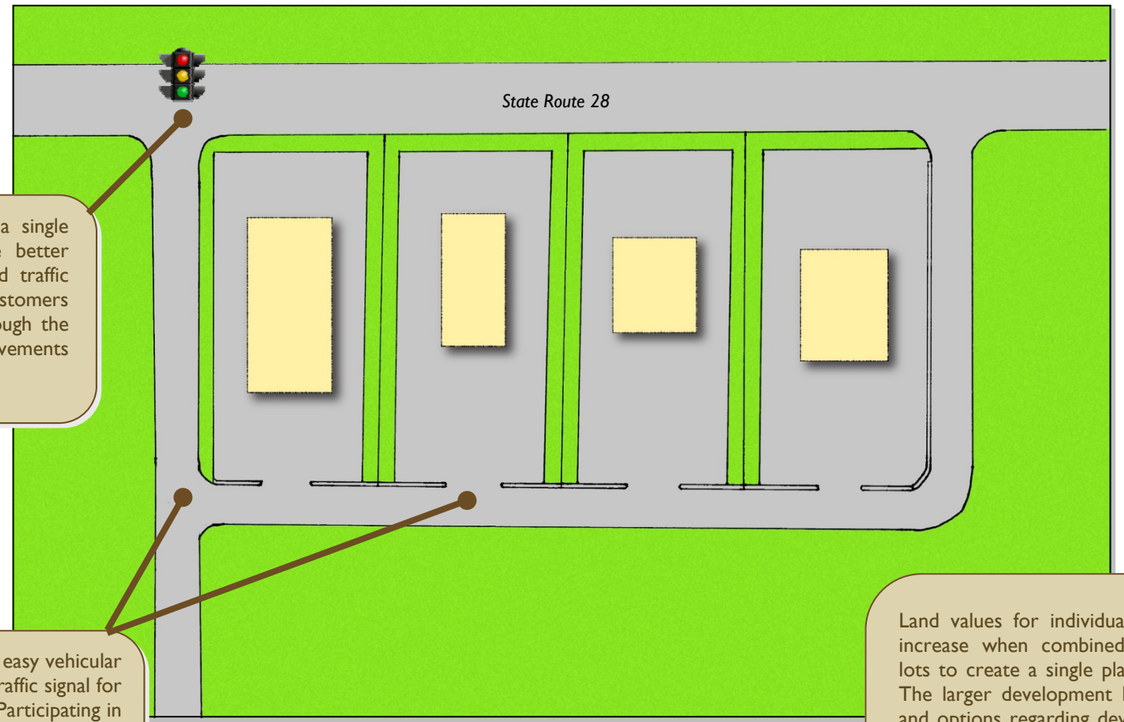
STATE ROUTE 28 CORRIDOR IMPROVEMENTS

ACCESS MANAGEMENT

9.1 ACCESS MANAGEMENT OVERVIEW

The Shared Benefit Approach to Corridor Land Development

Parcels assembled as part of a master planned development with access management techniques in place often retain a higher market value versus land sold separately for individual out parcel developments. Below is an illustration depicting a best practice scenario featuring multiple parcels fronting along the corridor roadway. These parcels are developed as a single master planned project for purposes of access management and internal traffic flow.



What is Access Management?

Access management is the coordination of land use and access to a highway. The goal is to develop plans that will allow for economic growth and rational development while maintaining or improving safety and mobility along an existing roadway. This can be a powerful tool to direct development and preserve agricultural properties along a corridor. In areas designated as development nodes along State Route 28, an access management plan can increase the capacity of the overall corridor to accommodate development while maintaining a high quality level of traffic service. In the areas not contained within the designated development nodes, access management can minimize development pressure associated with highways in areas where development is not planned.

The need for better access management is most obvious in strip commercial areas where driveways are found every few feet. Too many driveways can confuse drivers, who become uncertain as to when turns into or out of driveways will be made. Their existence results in a large number of turning movements and conflict points, increasing the potential for traffic accidents. In addition, where there are no turn lanes, each turning vehicle slows traffic and reduces the carrying capacity of the road. Unfortunately, once an access management problem is obvious, it is often too late to correct. By managing access along State Route 28 during site development, safe access can be provided while preserving traffic flow.

The Benefits of Access Management

When a growing corridor follows a well planned access management program, the amount of infrastructure improvements required to service the corridor properties is substantially less compared to retrofitting the corridor with costly improvements to correct traffic and access issues. The benefits of an access management program for SR 28 includes:

- Reduced vehicle crashes and crash potential.
- Preservation of roadway capacity and the useful life of SR 28.
- Decreased travel time and congestion.
- Improved business access to properties.
- Reduces the amount of public investment in the transportation infrastructure.

9.2 How Access Management Affects Business Operations

Customer Traffic Demand is Critical to the Survival of Commercial Business Districts

If you operate or develop commercial centers or stand-alone establishments, proper location and design of access is essential to customers and employees. For commercial centers, the Urban Land Institute's Shopping Center Development Handbook states "poorly designed entrances and exits not only present a traffic hazard, but also cause congestion that can create a negative image of the center." This is also true for small businesses, especially those on the intersection of busy roads. If a business is difficult or unsafe to enter or exit, then customers may likely be dissuaded from visiting.

The Effect of Traffic Congestion on a Business Corridor

Access management guidelines not only improve roadway safety, it also helps reduce the growing problem of traffic congestion. Frequent access and closely spaced signals increase congestion on major roads such as SR 28. As congestion increases, so does delay, which is bad for the economy and frustrating to potential customers. Well-managed arterial roadways can operate at speeds well above poorly managed roadways — up to 15 to 20 miles per hour faster. This means more traffic traveling past businesses and better exposure for those businesses. It also translates into a more convenient shopping experience for customers.

The Effect of Access Management Design Techniques on Business Sites

To address this question, it's important to first recognize that generally, a typical business corridor contains two primary types of business establishments, either drive-by business or destination business.

- **"Destination businesses"** are businesses that customers plan to visit in advance of the trip. Examples include specialty retailers, most professional services (office) uses, regional or national based retailers, sit-down restaurants, etc.
- **"Drive-by businesses"** are those that customers frequent more on impulse or while driving by, such as convenience stores, gas stations, or fast food restaurants.

Drive-by business customers will expect to get in and out of the site easily from the highway. The critical site issues are visibility, signage, and convenient access.

If the business site is relatively small, a driveway connecting to the highway may not be the best option. A driveway on a reverse frontage road or sharing access points among multiple sites can increase the convenience of access and the volume of customers that may be accommodated. Convenient access can be provided by cross access easements to access an intersection or curb cut along the arterial highway. Conversely, short driveways or open frontages not only cause safety hazards for pedestrians and traffic, but have less capacity than local roads or long driveways.

Destination business customers are planning their trips in advance.

A driveway on a congested highway or a highway that is perceived as unsafe may actually intimidate customers from making the trip. Most small destination businesses or specialty stores benefit more from access to a lower speed minor road, such as a neighborhood collector road. The greater exposure that a major road provides is an advantage for larger destination businesses, but it's a good idea to have access from more than one roadway. Allowing customers to enter and exit from different directions will increase both safety and convenience which translates into higher sales volume.

9.3 How Access Management Affects Property Values

Access management balances mobility and access. Properties with direct access to the highway are often seen as most valuable, however; when access is permitted too close to an intersection, the access can become blocked by standing traffic making the property inaccessible over certain periods of time. Property has a greater value if its driveway locations are well planned and designed. Therefore, a primary goal of access management is to achieve a safe and efficient flow of traffic along a roadway while providing reasonable access to abutting properties. This generally creates higher sales volumes and more successful business districts.

Property Values: Most property owners surveyed following an access management project do not report any adverse effect of the project on property values. Often, such projects can have a positive effect by cleaning up the patchwork of driveways and curb cuts. For example:

- A study of property values on Texas corridors with access management projects found that land values stayed the same or increased, with very few exceptions (1)
- More than 70% of the businesses impacted by a project in Florida involving several median opening closures reported no change in property value, while 13% reported some increase in value (2)
- A 2005 study of commercial property values along a major access management project in Minnesota found that property values depend more on the strength of the local economy and the general location of the property in the metropolitan area; changes in access seemed to have little or no effect on the value of parcels (3).
- A study of Kansas properties impacted by access changes found that the majority were suitable for the same types of commercial uses after the access management project was completed. This was true even for businesses that had direct access before the project and access only via frontage roads after project completion (4).



Sources:

(1) W. Eisele & W. Frawley, *A Methodology for Determining Economic Impacts of Raised Medians*.
(2) F. Vargas & Y. Guatam, Problem: Roadway Safety vs. Commercial Development Access.
(3) D. Plazak & H. Preston, Long-Term Impacts of Access Management on Business and Land Development Along Minnesota Interstate-394.
(4) M. Rees, T. Orrick & R. Marx, *Police Power Regulation of Highway Access and the Traffic Flow in the State of Kansas,* presentation
* *Information and text for other portions of this page was obtained from the Federal Highway Administration*

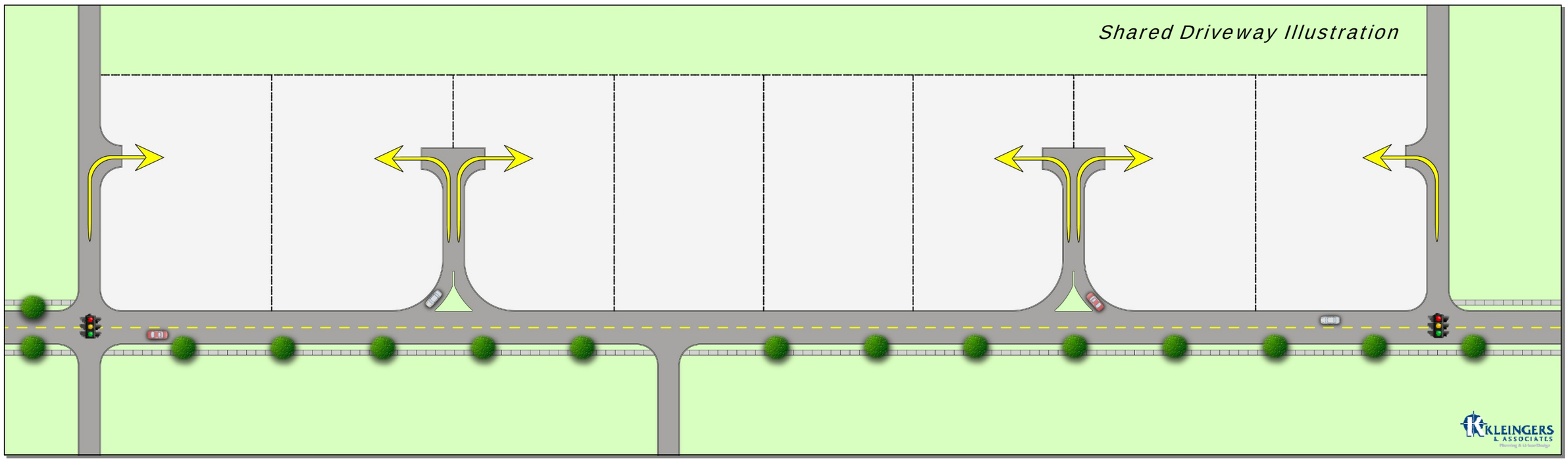
9.4 Shared Driveways

A shared driveway is when two or more adjacent properties use the same driveway for ingress and/or egress. Shared driveways are very common in newer commercial areas, for instance at strip commercial developments, regional shopping centers, and office developments. Sharing driveways represents good design practice since conflict points caused by motorists entering and leaving the businesses are reduced. This will, in turn, tend to reduce traffic accidents associated with turning traffic and improve the traffic flow on the State Route 28.

When is driveway sharing most valuable?

Sharing driveways is most valuable as an access management strategy when property frontages are short. That is, when the number of commercial properties along a typical rural corridor, 400 to 500 foot block face, is more than three or four. A rule of thumb on driveway sharing in a suburban / rural emerging area might be that properties with less than 50 to 60 feet of frontage along an arterial roadway should not have individual driveways. These properties would share drives with neighboring properties. Three to four commercial driveways per block face is a desirable maximum standard for suburban arterial roadway. This means that when there are more than three or four parcels or commercial buildings on a block face, driveway sharing, and other techniques such as implementing cross access easements, should be strongly encouraged. When the number of parcels and potential driveways along a block face is minimal, driveway sharing may not be needed.

The shared driveways shown above serve multiple freestanding uses per driveway, thus reducing the number of curb cuts.



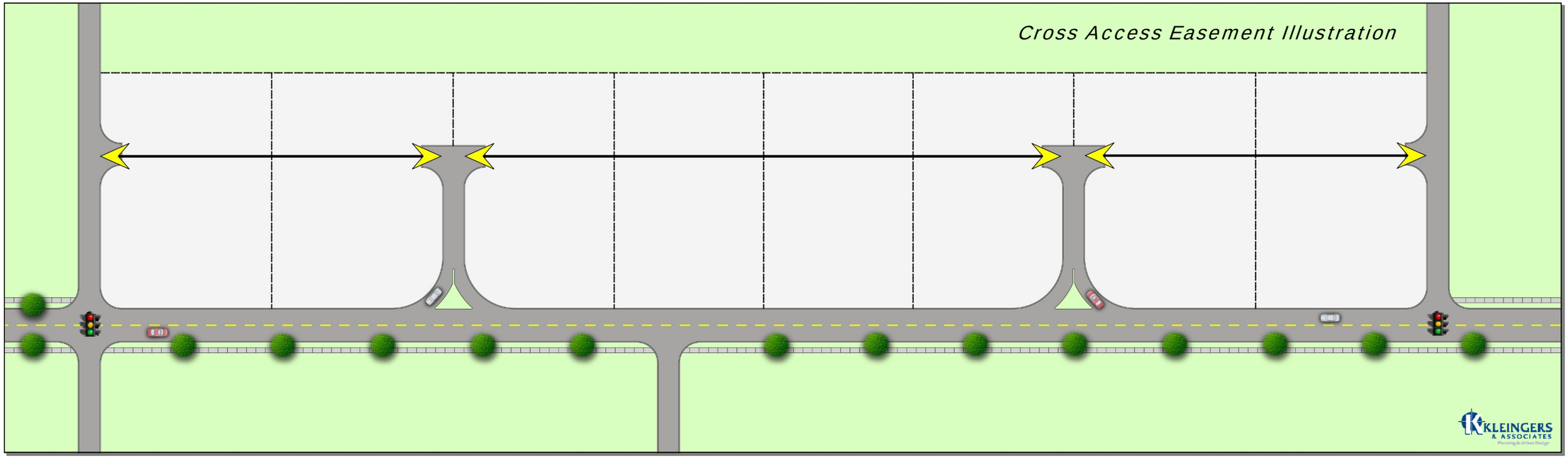
Shared Driveway Illustration: The drawing shown above illustrates how shared driveway access can be achieved for commercial outparcel development along State Route 28. The reduced curb cuts and restricted turning movements direct traffic to the more efficient roadway intersections which increases the safety and ease of access to all of the parcels.

9.5 Cross Access Easements

Cross access easements are formal, legal methods of ensuring that adjacent properties can share driveways and share access among adjacent sites. In the case of cross access easements, one property owner has the legal right to access and use a driveway that is on the adjacent property owner's land in addition to the ability to travel across the other lots parking areas or service roads to access a driveway or roadway. Because access is shared, it is also easier to share parking areas.

One way that joint access can be implemented is by prohibiting direct access from outparcels and lots that are carved from larger lots. Instead, the owner of the original parcel provides access rights from the old lot to the new. If the original host lot is not immediately developed, the developer of the newer lot may be allowed a temporary driveway, which would be closed when the original lot is developed. The easement or access agreement is recorded with the property records, along with a joint maintenance agreement, and an agreement to close the temporary driveway when the joint access system is complete. As an alternative, property owners can create a binding joint access and cross easement plan before subdividing their property.

The cross access easements highlighted above are situated over multiple individual properties in order to provide vehicular movement across several sites.

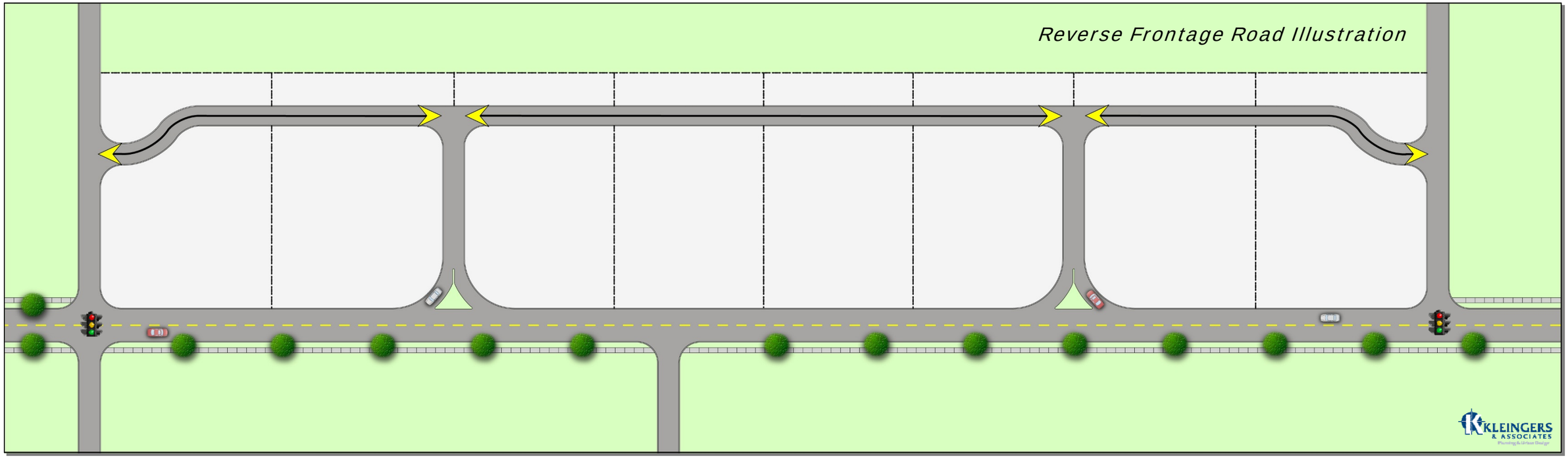


9.6 Frontage Roads and Reverse Frontage Roads

When land is subdivided for commercial and office developments along a corridor, the lots abutting the major arterial roadway should not be allowed direct vehicular access to the arterial street. Instead, an interior roadway (a frontage road or reverse frontage road) which provides access to the arterial roadway should be required. This eliminates the conflicts between high-speed traffic and traffic entering and exiting at closely spaced driveways. Access to the arterial roadway is provided at a location which can meet separation and corner clearance standards, and which can then be designed to safely handle the traffic generated by the development.

Reverse frontage roads are preferred over frontage roads when a commercial or office development contains both outparcels situated near the arterial roadway and a larger anchor user located behind the outparcels. In this instance, a reverse frontage roads meets the objectives of access management while also providing more efficient traffic flow for the entire development. Frontage roads are better suited for smaller strip style commercial and office developments where several outparcels are developed next to each other with no anchor use located behind those outparcel properties.

Reverse frontage roads provide efficient traffic movement in the rear yard areas of outparcels and can also serve larger "big box" uses situated behind the outparcel frontage lots.



SECTION 10

IMPLEMENTATION PLAN

STATE ROUTE 28 CORRIDOR IMPROVEMENTS

IMPLEMENTATION PLAN

STEP 1: Land Use Implementation Action Steps

Consider the following amendments to the local Township zoning resolutions:

Draft development node overlay district guidelines and implement over the designated nodal areas. Overlay requirements may address many site development issues including access management related elements including: joint (shared) access, parking lot cross access, reverse frontage roads, driveway spacing, and limitations on new driveways.

Create or update a Township Transportation Master Plan to set forth the planned improvements to State Route 28 and accessory roadways to establish development and infrastructure improvement expectations.

Create Nodal Transportation & Access plans setting forth reverse frontage road networks, planned consolidated curb cut plans and establishing primary nodal access points along State Route 28. These plans may be incorporated into the Development Node Overlay District standards.

Engage in Public Education& Development Due Diligence Initiatives

Engage in a proactive outreach program to property owners located in and adjacent to the identified development node areas regarding the financial benefits to adopting a "shared benefit" development approach and the direct property benefits of preserving future State Route 28 right-of-way when seeking to sell or develop their property.

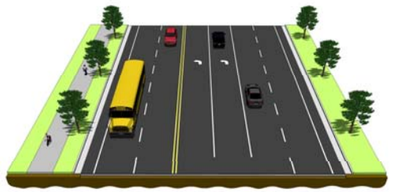
Provide property owners with the various zoning and economic development tools available to them used to increase the market value and marketability of their property. Such programs may include the voluntary application of Development Node Overlay Districts, Blanket Tax Increment Financing Districts and Right-of-Way easement dedications.

Right-of-Way Preservation

Establish the needed right-of-way width along the corridor and require proposed developments to dedicate / reserve land to accommodate future transportation improvements.

Based on the performed analyses, a 120-foot wide right-of-way is desired to provide sufficient room for the needed State Route 28 roadway section.

Controlled access segment: typical section



Signalized intersection approach: typical section

STEP 2: Access Management Plan Implementation Plan

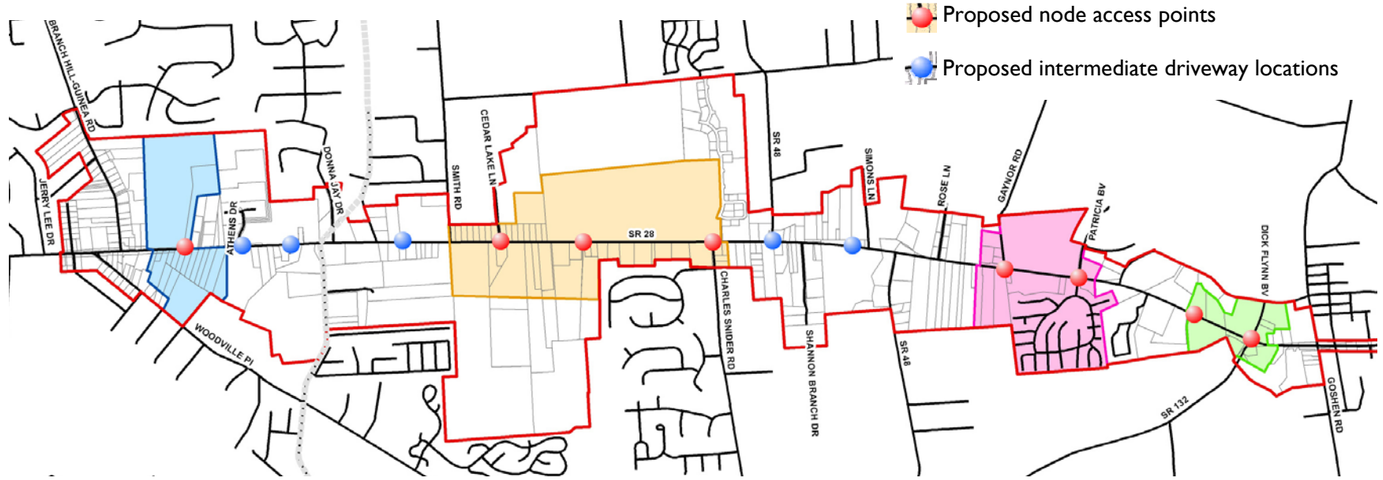
Supplement the Clermont County access management regulations through the adoption of local access management guidelines applicable to the specific needs of the planned development for each respective Township. Critical access management issues to address include:

- Regulate driveway spacing, sight distance, and corner clearance.
- Restrict the number of new driveways per existing parcel along State Route 28.
- Increase minimum lot frontage along State Route 28.
- Require immediate or future joint access and parking lot cross access.
- Review lot splits as a minor subdivision to prevent access problems.
- Regulate private roads and require maintenance agreements.
- Establish reverse frontage road requirements for commercial subdivisions.
- Require the use of unified circulation and parking plans.
- When practical, establish access locations for (re-)development to be consistent with a desired access point location plan.

Desired primary access point locations

Proposed node access points

Proposed intermediate driveway locations



Adopting Corridor Overlay Districts

An effective method for implementing uniform access management guidelines can be achieved through the adoption of Corridor Overlay Districts. These zoning district overlays may be applied to a variety of corridor areas throughout Clermont County and modified as required by each local jurisdiction. A suggested list of access management issues that may be included in a corridor overlay district includes:

- Site Access Standards
  Specific Elements May Include:
  - Joint and Cross Access
  - Internal Access to Outparcels
  - Vehicular Use Limitations
  - Service Roads
  - Future Access Closures / Joint Access Connections
  - Paved Shoulder By-Pass at Three-way Intersections
  - Left-Turn Bay at Median Opening
  - Right Turn Bay
  - Use of Alternative Access (when available)
  - Appropriate Residential and Commercial Driveway Design
  - Varying Permit Requirements Based on Use of Property'
  - Ensure Adequate Sight Distances
  - Shared Driveways
- Right-of-Way Preservation
  - Acquisition of Access Rights
  - Dedication of Future Right-of-Way
- Traffic Impact Study Requirements
- Pedestrian and Bicycle Amenities and Associated Safety Implication
- Transit Facility Considerations

STEP 3: Development Node Districts Implementation Plan

Implementing the Financing Tools to Create Development Node Districts

Proactively work with the strategically located property owners in implementing Blanket Tax Increment Financing Districts over nodal areas designated for future commercial and office development. A "Springing TIF" should be considered in order to preserve the statutory time provisions for TIF districts.

The local jurisdictions may consider approaching adjacent and nearby municipalities regarding the creation of a Joint Economic Development District in order to generate income tax revenue. A JEDD may be applied, along with a TIF District, over a designated nodal area to delineate the boundaries of a Development Node District through which revenue can assist in the funding of future infrastructure improvements benefiting the district.

Establish Community Reinvestment Area Districts over the designated Development Node District properties. Appropriate development guidelines and project thresholds should be applied as part of a CRA program stipulating eligibility for project incentives including new FTE job creation, annual payroll minimums and real property investment minimums. For tax collection purposes, CRA abatements take priority over established TIF district revenue. Therefore, a critical part of CRA project eligibility criteria should include provisions for developer financed off-site improvements as required by the intensity of the proposed development plan based upon the findings of a development traffic impact study.

STEP 4: Infrastructure Improvement Action Steps

The previous steps establish the foundation and basis for providing infrastructure improvements needed for the corridor. As the analyses shows, in order to support the anticipated development, infrastructure improvements are required to State Route 28.

The timing for construction of the improvements is largely dependent on the development market; therefore, it is difficult to establish a firm date for when an expanded roadway section is needed. However, as the private market is known to fluctuate suddenly and develop projects quickly (much more rapidly than a typical public infrastructure project progresses), it is important to have planned infrastructure improvements "ready to go" in order to make this area desirable for potential development. Based on this theory, continued development of infrastructure improvement plans could overlap the schedule for completion of Steps 1 through 3 in order to take advantage of market opportunities.

Corridor Development Action Plan